

CLAIMS**WHAT IS CLAIMED IS:**

1. A self-assembled composition comprising:
a guest species; and
self-assembling molecules, said self-assembling molecules forming a self-assembled structure having an elongated structure.
2. The composition of claim 1 wherein the self assembling molecule is a dendron rod coil.
3. The composition of claim 1 wherein the self assembled structure is a ribbon.
4. The composition of claim 1 wherein the self assembled structure forms a gel that is birefringent.
5. The composition of claim 1 wherein the guest species is luminescent.
6. The composition of claim 1 wherein said guest species is distributed within said self assembled structure.
7. The composition of claim 1 wherein an axis of said guest species and an axis of said self assembled structure are aligned with one another.
8. The composition of claim 1 wherein the guest species is ZnO.
9. The composition of claim 1 further comprising an organic solvent.
10. A method of dispersing guest species in a gel comprised of:
self-assembling molecules into said gel to thereby disperse said guest species within said gel.
11. The method of claim 10 wherein said self assembling molecules form nanoribbons.
12. The method of claim 10 wherein said gel is birefringent.
13. The method of claim 10 wherein the self assembling molecules are dendron rodcoils.
14. The method of claim 10 wherein the guest species is luminescent.
15. A method for orienting a guest species in gel comprising:

applying an electric field to a combination of self assembling molecules and guest species.

16. The method of claim 15 wherein the self assembling molecules form one dimensional structures.

17. The method of claim 15 wherein the guest species are dispersed within said gel.

18. The method of claim 15 wherein a solvent is removed from the combination of self assembling molecules and guest species by the application of said electric field.

19. A lasing medium comprising:

a luminescent guest species dispersed in a gel, said gel formed by self assembled molecules.

20. The lasing medium of claim 19 wherein the guest species includes ZnO.

21. The lasing medium of claim 19 wherein the self assembled molecules include dendron rodcoils.